



Missouri Department of Natural Resources

Honey Creek - WBID 1251

Water Chemistry Data, 2000-2006

Org	Site	Site Name	Yr	Mo	Dy	Time	H	Flow	C	DO	pH	SC	SO4	Cl	SO4+Cl
MoDNR	1251/2.1	Honey Cr. at Hwy O	2000	8	4	1100	4				7.5	775	260	10	270
MoDNR	1251/2.1	Honey Cr. at Hwy O	2003	7	29	1057	4		24.5		7.6	972	286	14	300
MoDNR	1251/2.1	Honey Cr. at Hwy O	2003	12	30	1015			4		6.9	522	119	13	132
MoDNR	1251/2.1	Honey Cr. at Hwy O	2004	8	13	1730					7.6		255	13	268
MoDNR	1251/2.1	Honey Cr. at Hwy O	2004	9	29	1220			18		7.5	770	216	13	229
MoDNR	1251/2.1	Honey Cr. at Hwy O	2005	2	3	1425			3.6		7.4	845	251	15	266
MoDNR	1251/2.1	Honey Cr. at Hwy O	2005	3	16	835			7		7.3	887	254	16	270
MoDNR	1251/2.1	Honey Cr. at Hwy O	2005	5	19	1307			23.3		7.5	948	298	17	315
MoDNR	1251/2.1	Honey Cr. at Hwy O	2005	7	20	1402			28	3.2	7.9	1031	333	14	347
MoDNR	1251/2.1	Honey Cr. at Hwy O	2005	8	12	846	4		25	1.3	7.8	1091	362	14	376
MoDNR	1251/2.1	Honey Cr. at Hwy O	2006	2	2	925			6.3		7.6	2330	1370	6	1376
MoDNR	1251/2.1	Honey Cr. at Hwy O	2006	4	7	910			16	8.8	7.1	1290	212	19.8	232

The water quality standard for protection of aquatic life for sulfate plus chloride is 1000mg/L. The Listing Methodology Document allows a water to be judged as impaired if 10 percent of measurements fail to meet the water quality standard. One of 12 samples exceeded the standard, or 8.3 percent. The binomial probability is .341. Since this probability is more than the minimum allowable type one error rate of 0.1, this segment is judged to be **unimpaired** by sulfate plus chloride.

The U.S. Environmental Protection Agency approved a total maximum daily load for sulfate for Honey Creek in 2006.

The water quality standard for the protection of aquatic life for dissolved oxygen is 5mg/L. For dissolved oxygen, the Listing Methodology Document allows a water to be judged as impaired if measurements on 10 percent of the days monitored fail to meet the water quality standard. Two of three days exceeded the standard, or 66.7 percent. However, the small size of the data set is inadequate for making a scientifically defensible decision regarding impairment. It is recommended that **additional monitoring** be done.

Missouri Department of Natural Resources, Water Protection Program, (573) 751-1300, www.dnr.mo.gov
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